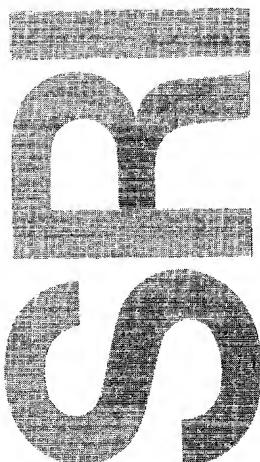


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PSYCHOENERGETIC RESEARCH: SUGGESTED APPROACHES

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EXECUTIVE SUMMARY

Recent research in both Western and Soviet Bloc countries continues to provide mounting evidence for the existence of so-called parapsychological or psychoenergetic processes. These include:

- (1) The acquisition and descriptions, by mental means, of information blocked from ordinary perception by distance or shielding and generally believed to be secure against such access.
- (2) The production of physical effects such as the perturbation of instrumentation or equipment that appears to be well shielded against such interactions.

This document identifies and discusses key areas of psychoenergetic research, and indicates those areas for experimentation and analysis most likely to provide answers to critical questions. An appropriate research program should include the following action items:

- Catalog the characteristics of the phenomenon, such as resolution, reliability, bit rate, effects of shielding, etc., including investigation of various models (e.g., electromagnetic)
- Ascertain those correlates of paranormal functioning which may lead to screening and training (psychological conditions, medical profiling; environmental factors; etc.)
- Determine application potential with regard to: alternate communications systems, enhanced environmental monitoring (near and far), information security processes, enhanced man/machine interactions, etc.

It is recommended that a research program be initiated with SRI along the lines indicated in this document. It is further recommended that SRI, as the major contractor, serve a dual function: (1) carry out the major portions of the contracted R&D efforts; and (2) host interagency and inter-contractor conferences to consolidate available resources and information.

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I INTRODUCTION

In this document we summarize and discuss key areas of psychoenergetic research. We deal with both the known and unknown in an effort to identify those research areas most likely to answer critical questions. No attempt is made to present evidence or data to support the existence of psychoenergetic phenomena; data supporting the existence of the phenomena can be found in the documents listed in the reference section at the end of the paper.

Recent publications provide mounting evidence for the existence of so-called parapsychological or paraphysical processes. These processes are taken to include the following:

- (1) The acquisition and description, by mental means, of information blocked from ordinary perception by distance or shielding and generally believed to be secure against such access.
- (2) The production of physical effects such as the perturbation of instrumentation or equipment that appear to be well shielded against such interactions.

The literature also indicates evidence of an acceleration of research in both Western and Soviet Bloc countries in an effort to precipitate a breakthrough. In the West, a large-scale exploratory research effort on psychoenergetic channels has been carried out by the authors in the Electronics and Bioengineering Laboratory and the Radio Physics Laboratory of SRI International. Our work dealt primarily with a human information-accessing capability that we call "remote viewing." This phenomenon pertains to the ability of certain individuals to access and describe, by means of mental processes, remote geographical locations up to several thousand km distant from their physical location. In more than 50 experiments with roughly a dozen subjects, including government scientists sent to examine experimental protocols, significant results were obtained in the viewing of remote buildings, laboratory apparatus, and real-time activities. From this work we conclude that^{1-3*}

* References are listed at the end of this document.

- (1) The phenomenon is not a sensitive function of distance over a range of several kilometers and is still operative over a range of several thousand kilometers.
- (2) Faraday cage electrical shielding does not appear to degrade the quality or accuracy of perception.
- (3) Most of the correct information pertains to shape, form, color, and material, rather than to function or name, suggesting that the function may be mediated primarily by the brain's right hemisphere.
- (4) The principal difference between experienced subjects and inexperienced volunteers is not that the latter do not exhibit the faculty but rather that their results are simply less reliable, indicating that remote viewing may be a latent and widely distributed, though suppressed, perceptual ability.
- (5) Subjects trained over a several-year period have shown improved performance under continuing experiments.
- (6) Clear evidence has been obtained showing that subjects in laboratory experiments can describe future events, not yet determined at the time of their description.

The breadth of work in this area of research in the Soviet Union and Czechoslovakia is detailed in a recent document prepared by the U.S. Army Medical Intelligence and Information Agency.⁴ In this document it is pointed out that, beginning with early work (1930s) in the laboratory of L. Vasiliev⁵ (Leningrad Institute for Brain Research), Soviet efforts in the area of paranormal functioning have concentrated on behavior modification and control (e.g., putting people into a trance at a distance through hypnosis). This is in contrast to the Western orientation toward remote data acquisition. Also, apparently in keeping with their ideology, the Soviet's work is strongly oriented toward the physical aspects of the channel, such as determining the propagation mechanisms involved. Indeed, some of the best theoretical work has been done by Soviet researcher I. Kogan in his investigation of the ELF (extremely low frequency) electromagnetic hypothesis.⁶⁻⁹

A study by Garrett Airesearch, a review of the Soviet literature on psychoenergetic research, treats Soviet application of statistical theories, research done on electrostatics, the development of remote sensors, hypothesized carrier mechanisms, human sensitivity to magnetic fields, and training to improve psychoenergetic performance.¹⁰⁻¹¹

Garrett concludes that the Soviet Bloc has had and probably still has an active interest and vigorous research program in this area.

The above reports point to the increasing importance of the psycho-energetic area in Soviet research, an importance underlined in 1973 when the Soviet Psychological Association issued an unprecedented position paper calling on the Soviet Academy of Sciences to step up efforts in this area.¹² The Association recommended that the newly formed Psychological Institute within the Soviet Academy of Sciences and the Psychological Institute of the Academy of Pedagogical Sciences review the area and consider the creation of a new laboratory within one of the institutes to study persons with unusual abilities. It also recommended a comprehensive evaluation of experiments and theory by the Academy of Sciences' Institute of Biophysics and Institute for the Problems of Information Transmission.

Two more recent classified reports issued in 1977 also provide detailed analyses of the scope, direction, and distribution of Soviet and East Bloc research in psychoenergetics.^{13,14} These reports in no way contradict the data and conclusions presented in the unclassified literature, which they are intended to supplement.

In this document we concentrate on those areas of psychoenergetic research that, in our judgement, need to be addressed to provide answers to critical questions. Tables 1 and 2 represent a matrix, or "road map" of the various areas of interest, and indicate the type of experimentation that needs to be done in each area.

Table 1 represents a breakdown of the various psychoenergetic processes; the two main classifications are:

- Perceptual processes, which act as information input to a human subject (remote viewing, telepathy, dowsing, etc.)
- Perturbation (psychokinetic) processes, which act as output control from a human subject (generation of fields, temperature changes, mechanical forces, physiological effects, etc.)

Table 2 indicates the various action item areas for experimentation and analysis: It identifies three areas of activity:

Table 1

BREAKDOWN OF THE VARIOUS PSYCHOENERGETIC PROCESSES

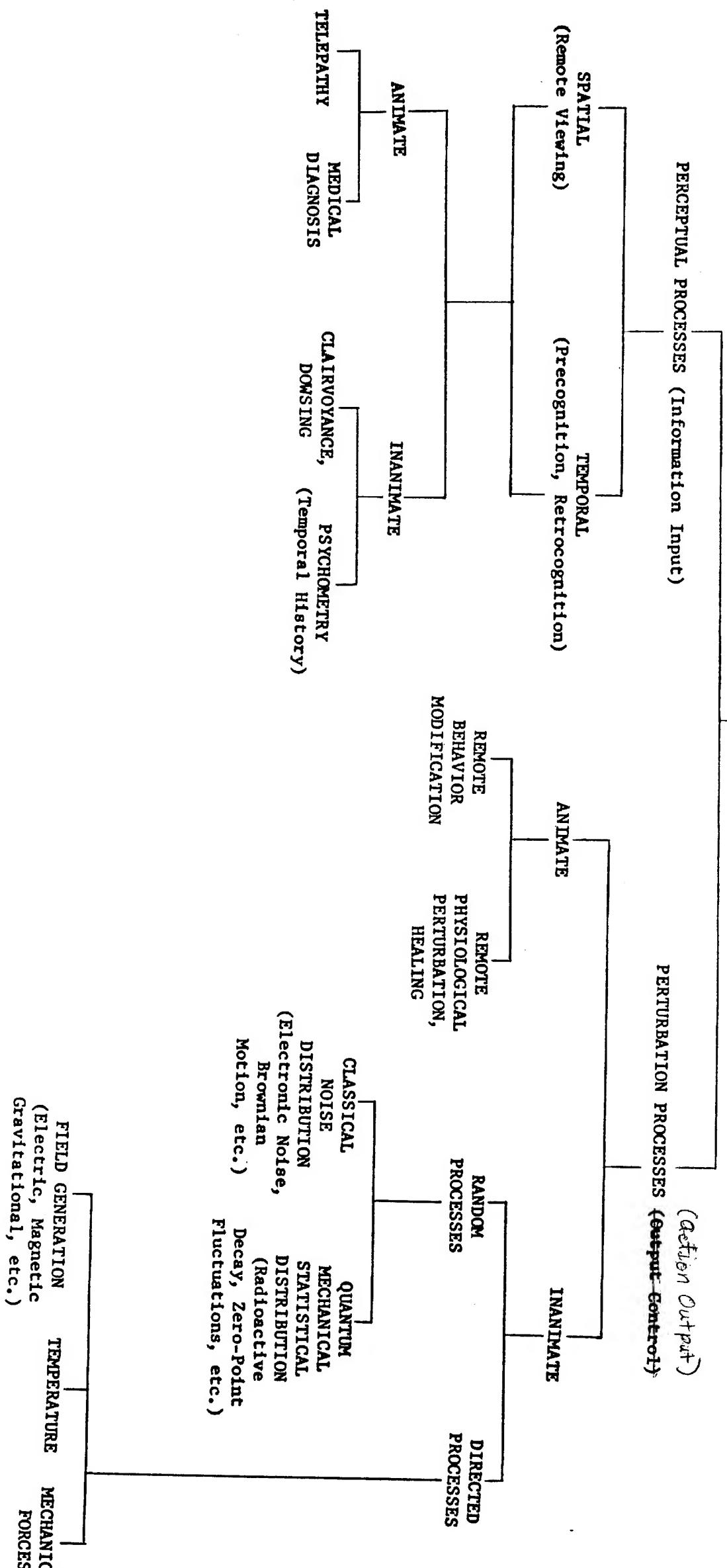


Table 2

ACTION ITEM AREAS FOR RESEARCH IN PSYCHOENERGETICS

CHARACTERISTICS, ANALYSIS & THEORY

PSYCHOPHYSIOLOGICAL CORRELATES				APPLICATION POTENTIAL	
CHARACTERISTICS				ENHANCED ENVIRONMENTAL INFORMATION MONITORING	
MECHANISM-INDEPENDENT ANALYSIS		MECHANISMS		ALTERNATE COMMUNICATIONS CAPABILITIES	
INFORMATION THEORY, CODING		PHYSIOLOGICAL CORRELATES (EEG, GSR, EMG)		ENVIRONMENTAL FACTORS (Sensory Deprivation, Altered States, Stress Environments, Experimenter Effects)	
PSYCHOPHYSICS		PSYCHOLOGICAL, MEDICAL PROFILING		EDUCATIONAL PROCEDURES	
(Bit Rate, Redundancy Required, Message Transmission, Judging Techniques)		(Analogies to Ordinary Perception (Perceptual Tasks Paralleling Ordinary Perception)		ADDITIONAL INFORMATION SECURITY PROCESSES	
ANALOGS TO BRAIN-HEMISPHERIC SPECIFICATION LOCALIZATION		NOISE PERTURBATION (Radioactive Decay, Electronic Noise)		ENHANCED HUMAN/MACHINE INTERACTIONS	
EXPERIMENTS		STRAIN GAUGE EXPERIMENTS		CREATION OF NEW INDUSTRIAL COMPONENTS	
ELECTROMAGNETIC (ELF Beacons, Jamming, Submersible Shielding, Propagation Velocity)		QUANTUM MECHANICS (Non-locality, Quantum-Inter-connectedness, Holographic)		NEW APPLICATIONS IN SYSTEMS TECHNOLOGY AND ENERGY ECONOMICS	
TEMPORAL & PATIONAL & SOLUTION (Subject Confidence, Coding Target Size, Information Rate, Motion)		TARGETING (Geographic Coordinates Biographical Histories, Target Agent, Electronic Information Storage)		ROLE OF FEEDBACK (Computer-Controlled and Scored Versus Human-Mediated Mechanisms)	
CHARACTERISTICS		ROLE OF CONSCIOUSNESS		ALTERNATE MEDICAL/PSYCHOLOGICAL TREATMENT STRATEGIES	
CHARACTERISTICS		ROLE OF FEEDBACK		PRODUCTION OF NEW EDUCATIONAL METHODS	

- Catalog the characteristics of the phenomenon, such as resolution, reliability, bit rate, effects of shielding, etc., including investigation of various models (e.g., electromagnetic)
- Ascertain those correlates of paranormal functioning which may lead to screening and training (psychological conditions, medical profiling, environmental factors, etc.)
- Determine application potential with regard to: alternate communications systems, enhanced environmental monitoring (near and far), application to information security processes, enhanced man/machine interactions, etc.

Section II of this document lists knowns and unknowns about items in the tables; Section III summarizes research strategies for handling the specific areas; and Section IV presents our priorities and recommendations.

II KNOWNS AND UNKNOWNNS IN PSYCHOENERGETIC RESEARCH

The following pages provide a brief description of what is known (K) and unknown (UK) about the psychoenergetic processes shown in Tables 1 and 2. The discussion under each heading is not intended to be an exhaustive treatment of the subject, but rather serves as a brief listing of salient points.

- Remote Viewing Characteristics

K: Abilities appear widespread, though latent; results are insensitive to distance and shielding; shape, form, color, material are described better than analytical concepts (function, name).

UK: Extent to which a subject can improve spatial and temporal resolution, accuracy of the process; upper limit to bit rate; ability to track targets in motion; whether, and to what extent, psychoenergetic processes can be amplified by technological means.

- Target Acquisition

K: Subject can acquire target site on the basis of presence of cooperative agent at site; targeting by geographical coordinates without agent.

UK: What is necessary for target acquisition (names, maps, pictures, other coordinate systems); accuracy of target acquisition, e.g., circular error of probability (CEP); how subject identifies target.

- Other Sensory Modalities

K: In addition to visually observable detail, subjects sometimes report sounds, smells, electromagnetic fields, etc. at target locations.

UK: The accuracy of these sensory modalities; other sensory modes available.

- Time of Flight

K: Information access often appears to be available in essentially "real" time.

UK: Time-of-flight of psychoenergetic phenomena; mechanism of propagation.

- Precognitive Remote Viewing

K: Some subjects report precognitive perception of future events; laboratory experiments verify access to information up to an hour in the future.

UK: Limit to forward temporal distance of the phenomenon; basic mechanisms involved; event time accuracy, especially as a function of temporal distance.

- Mechanisms, Theoretical Models

K: Phenomena characteristics (relative independence of distance, shielding, temporal order) often appear to be at variance with present scientific models.

UK: Mechanisms responsible for the phenomena; relationship of phenomena to electromagnetic, quantum, etc. bases of present scientific understanding; degree to which phenomena can be mechanized, energy stored.

- Random Number Generators

K: Subjects appear to induce perturbations in the output of noise and nuclear-decay-driven random-number generators.

UK: To what extent this process can be stabilized; mechanisms responsible for this type of interaction.

- Magnetometers, Temperature Devices, and Pendulums

K: Past experiments indicate possible psychoenergetic interaction with these devices.

UK: Repeatability of phenomena; limits to magnitude of effects; other types of devices capable of registering such interactions (nuclear decay, gravitational, neutrino, Mossbauer effects?); mechanisms responsible.

- EM (Electromagnetic) Effects

K: Subjects can sense certain EM parameters (frequency [i.e. color], presence/absence of EM noise); ELF (extremely low frequency) models can account for certain parameters of psychoenergetic functioning (low bit rate, relative independence of distance and shielding).

UK: To what extent, if any, EM mechanisms play a role; efficacy of ELF generators for targeting, jamming; effectiveness of shielding obtainable by deep-diving submersible.

- Physiological Correlates

K: Physiological measures such as brainwave activity, galvanic skin response, blood volume sometimes correlate with psychoenergetic effects.

UK: Stability of such correlations; coupling mechanisms involved.

- Training

K: Widespread latent abilities observed in the population; decline effect, with certain types of experiments; many SRI subjects have improved with practice; evidence for trainability.

UK: Extent to which remote viewing ability can be taught to novice subjects; what enables good subjects to enhance their ability; significance of environmental factors; effects of experimenter psychology; percentage of population trainable; optimum screening tests, profiling methods.

- Application Potential

K: Low-bit-rate communication via psychoenergetic processes possible, low-level perturbation of equipments observable, low-level physiological effects probable.

UK: Optimum systems design for, and degree to which competitive; applications in environmental information monitoring; communications; security; machine control; component design and mechanization; energy storage; medical/psychological diagnosis and treatment strategies; education.

III RESEARCH APPROACHES

A. Objective

A comprehensive program is proposed that is based on information derived from SRI experimentation and the documented work of others. The goals of the program are twofold:

- To establish the repeatability of the psychoenergetic process and the statistics that govern its usefulness for various applications
- To determine the underlying physical characteristics of the channel, such as bit rate, channel capacity, and resolution potential.

B. Characteristics, Analysis, and Theory

1. Characteristics

a. Remote Viewing Reliability Enhancement (Coding)

One of the most successful psychoenergetic processes is the remote viewing of target locations demarcated by some means, such as the presence at the site of an individual known to the "viewer". Unfortunately, this process--which works so well--results in narrative description that is difficult to assess in a quantitative manner.

In order to utilize the remote sensing phenomena as a tool to investigate the physical and psychological parameters of psychoenergetic processes, it is important to establish optimum analysis (judging) procedures. Because experiments are designed with the goal of varying specific parameters, such as subject shielding or the necessity of feedback, the analysis or judging procedure must be as rapid as possible, while retaining objectivity, if immediate feedback to both subject and experimenters is to be provided.

To objectify the analysis of a single response from a subject during a remote sensing experiment, it is necessary to quantify the target content in some discrete way. From an examination

of the data base accumulated to date it would appear that at least five recurrent target attributes are frequently sensed correctly by our subjects. If each of these attributes is assigned a binary digit--a "one" if the attribute is present at the target site, and a "zero" if it is absent--we can, for the sake of research experimentation, construct a pool of 32 targets corresponding to all possible combinations of five individual attribute bits. Table 3 shows one such example for an indoor swimming pool.

Table 3
QUANTITATIVE JUDGING TECHNIQUE

Code Word Bit Position	Target Attribute	Bit Assignment
1	Inside	1
	Outside	0
2	Subdued lighting	1
	Bright lighting	0
3	Wet	1
	Dry	0
4	Passive	1
	Active	0
5	Man-made	1
	Natural	0

A judging procedure utilizing the binary-coded target pool is then as follows. After a target is selected at random, and after the subject has registered his response in the usual way, the judge's task is simply to ascertain from the subject's response whether each of the five attributes is present (1) or absent (0). The resulting five-bit number is then compared to the actual five-bit number for the target. In the case of good functioning, it is possible to obtain statistically significant results with one or two such trials. From pilot work it appears that the individual attributes are identified with an 80% reliability; thus the results indicate that this judging procedure may provide a rapid and accurate technique to use remote sensing as a tool to test various models of psychoenergetic functioning.